

CF *sub D1 acids. cont* wherein said peptide or peptide derivative has a length of up to 25 amino

C7 5. (Amended Twice) Peptide or peptide derivative as claimed in one of the claims 1 and 2 [to 3], wherein said peptide or peptide derivative [it] carries a marker group.

REMARKS

The amendment to the claims is made to more particularly pointing out and specifically claim the subject matter of what applicants consider to be the preferred embodiment of the present invention.

Claims 1-3 and 5-52 are pending.

INFORMATION DISCLOSURE STATEMENT (IDS)

The Examiner crossed out Document AH, i.e. EP 0 665 289A2 in the IDS filed on January 14, 2000 because no English translation was provided. An English abstract for EP 0 665 289, which is in the patent family of DE 4418091, obtained from Derwent is attached to this Response. With the English abstract now provided, applicants respectfully request that the Examiner consider EP 0 665 289A2 and mark on the IDS as considered.

Applicants note that the Information Disclosure Statement filed on March 29, 2000 contains a typographical error in that Document AG should be JP 7-70182 instead

of JP 7-70181. Since a copy of JP 7-70182 was attached to the Information Disclosure Statement, the typographical error should be apparent. Applicants request that the Examiner correct the typographical error in the IDS regarding JP 7-70182 and return an initialed copy of the IDS to applicants.

Restriction Requirement

The lack of unity of invention holding was maintained because the Patent Office was of the opinion that claim 1 reads on the GAD protein disclosed in Tobin because of "comprising". Applicants respectfully traverse. Applicants note that claim 1 recites that the maximum length of the peptide or peptide derivative claimed is 25 amino acids (the Response to the Restriction Requirement filed on January 18, 2000 cancels claim 4 and move the limitation of claim 4 to claim 1 regarding the maximum length of the peptide or peptide derivative). In order to make it more clear, applicants have make "wherein said peptide or peptide derivative has a length of up to 25 amino acids" the last two lines of claim 1. Applicants submit that claim 1 does not read on the GAD protein disclosed by Tobin. Therefore, the Patent Office's argument of lack of unity of invention is misplaced (the Patent Office argued that the claims lack unity of invention because the subject matters of the claims are not contributions over the prior art). Actually, the subject matters of the claims are indeed contributions over the prior art. Withdrawal of the restriction requirement and election of species requirement is requested.

The Office Action indicates that only a peptide or composition comprising the species of the peptide recited in claim 1(g) was examined on the merit. The Office Action states that claims 1-3, 5 and 18-20 are readable on the elected species. With the above discussion showing that all the claims have unity of invention, applicants submit that the examination should be extended to the full scope of the claims beyond the elected species.

Sequence Listing Requirements

The Office Action requires the specification to be amended to comply with the Sequence Listing Requirements. Applicants have amended the specification by reciting the SEQ ID NOs at appropriate places in the specification, e.g. replacing Fig. 1 and 2 with substitute Fig. 1 and 2 containing the SEQ ID NOs and inserting the appropriate SEQ ID NOs in the written descriptions of Fig. 5 and 6.

Abstract

Applicants request that the objection to the Abstract be withdrawn because applicants have amended the Abstract (page 51) as shown above.

Claim Rejections - - 35 U.S.C. §112, Second Paragraph

Claim 1 was rejected as indefinite due to a question on whether the amino acid sequence in (g) is SEQ ID NO: 4 or 7. Applicants note that in a Preliminary

Amendment filed on March 24, 2000, claim 1 was amended to recite that the sequence in (g) is SEQ ID NO:7.

Claim 1 was also rejected as indefinite because of the roman numerals. The roman numerals are now removed. Withdrawal of the indefinite rejection is requested.

The objection to claim 5 as improper multiple dependent claim should be withdrawn because claim 5 is now not dependent on another multiple dependent claim.

Claim Rejections – 35 U.S.C. 102

I. Claims 1-3, 5, 18 and 19 were rejected as anticipated by Tobin (WO 92/05446; herein after referred to as WO '446) because the Patent Office asserted that WO '446 teaches a peptide/derivative comprising F-F-R-M-V-I-S-N-P-A-A-T-H-Q-D-I-D-F-L-I (SEQ ID NO:7) in Figure 4, amino acid residues 556-575. Applicants respectfully traverse the rejection. As discussed above in refuting the lack of unity of invention holding, applicants point out that the claims should be interpreted in a way that the peptide or peptide derivative claimed has a maximum length of up to 25 amino acids. Even based on the version of claim 1 (Amended) presented in the Response to Restriction Requirement filed on January 18, 2000, the claims should have been interpreted to cover peptides or peptide derivatives of up to only 25 amino acids because the phrase "wherein said peptide or peptide derivative has a length of up to 25 amino acids" is separated from the remainder of claim 1 with a semicolon while parts (a)-(i) are separated with commas. Since the protein disclosed in Figure 4 of WO '446

is longer than 25 amino acids, the instant claims are not anticipated by WO '446.

Withdrawal of the anticipatory rejection over WO '446 is requested.

Applicants also note that the instant claims should not be obvious over WO '446 because there would have been no suggestion or motivation to modify the proteins or peptides of WO '446 to narrow to a peptide of up to 25 amino acids as recited in claim 1.

II. Claims 1-3, 18 and 19 were rejected as anticipated by Baekkeskov (WO 94/12529) because the Office Action asserts that figure 1, amino acid residues 556-575, discloses SEQ ID NO:7.

Applicants respectfully traverse the rejection. As discussed above, the Patent Office misinterpreted the instant claims. With the limitation of "up to 25 amino acids" in claim 1, applicants submit that claims 1-3, 18 and 19 are not anticipated by Baekkeskov. Withdrawal of the anticipatory rejection over Baekkeskov is requested. Similarly, the instant claims would not have been obvious over Baekkeskov due to a lack of suggestion or motivation to narrow the peptides or proteins of Baekkeskov to the peptide or peptide derivatives according to the instant claims.

III. Claims 1-3 were rejected as anticipated by Tobin (EP 0 519 469; herein after referred to as EP '469) because EP '469 discloses the amino acid sequence of SEQ ID NO:7 in figure 4, amino acid residues 556-575. Applicants respectfully traverse the

rejection based on reasons similar to the reasons against the anticipatory rejection over WO '446 discussed above.

IV. Claims 1-3, 5, 18 and 19 were rejected as anticipated by Tobin (WO 95/07992; herein after referred to as WO '992) because WO '992 discloses the amino acid sequence of SEQ ID NO:7 in figure 4, amino acid residues 556-575. Applicants respectfully traverse the rejection based on reasons similar to the reasons against the anticipatory rejection over WO '446 discussed above.

Claim Rejections – 35 U.S.C. §103

Claims 1-3, 5 and 18-20 were rejected as obvious over WO '446 in view of Burke (US 5,750,114). Applicants respectfully traverse the rejection.

WO '446 fails to teach or suggest a peptide that falls within claim 1 because there would have been no motivation to modify the peptides or proteins taught by WO '446 to arrive at the peptides or peptide derivatives of claim 1. Burke also fails to teach or suggest the peptides or peptide derivatives of claim 1. Additionally, Burke does not provide the motivation to modify the peptides or proteins of WO '446 to arrive at the claimed invention. Withdrawal of the obviousness rejection is requested.

Conclusion

With the above amendment and reasoning, applicants submit that the application is in a condition for allowance.

In the event this paper is not timely filed, applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to our Deposit Account No. 01-2300, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,
Arent Fox Kintner Plotkin & Kahn, PLLC

King L. Wong

King L. Wong
Registration No. 37,500

Atty. Docket No. 10564-07029

1050 Connecticut Avenue, N.W.
Suite 600
Washington, D.C. 20036-5339
Tel: (202) 857-6000

Enclosures: Substitute Fig. 1 and Fig. 2;
Derwent Abstract for EP 0 665 289